1. Introduction

1.1. Background

Naples was incorporated May 12, 1982. Much of the history of Naples is connected to Uintah County and areas round about.

The geography of Uintah County diverse and includes the high mountain terrain of the Uinta Mountains, the fertile Ashley Valley, a significant portion of Dinosaur National Monument-including the quarry- and the Green River, which bisects the county from the northeast to the southwest and forms the boundary between Carbon County and Uintah County. Fort Duchesne, which was established as a military post by the United States Army in 1886 and operated until 1913, is [now] the headquarters for the Ute Tribe.

Uintah County is located in the central portion of the Uinta Basin, which extends sixty miles into western Colorado. The northern rim of the basin is formed by the Uinta Mountains, the western rim by the Wasatch Mountains, and the southern rim by the Roan and Book cliffs. The basin is the geological remains of prehistoric Uinta Lake, formed during the late Tertiary period, the same period when sediment was deposited in the lake bottom to form gilsonite, oil shale, tar sands, and oil. Ashley Creek and the White, Uinta, and Green Rivers are the major streams in the county. The Green, the largest of the four, slices through the central portion of the county.

Prehistoric Indian sites suggest that the Uinta Basin was inhabited thousands of years ago by Archaic and more recently by Fremont peoples. In historic times it was part of the Utes' domain. The first white men in the area were Fathers Dominguez and Escalante who traveled through the Uinta Basin in 1776 searching for a land route to Monterey, California. In his diary Escalante called the basin "a fine plain abounding in pasturage and fertile, arable land, provided it were irrigated." Nearly fifty years later American and French trappers found the Basin rich in beaver and other wildlife. In 1831-32 Antoine Robidoux, a French trapper licensed by the Mexican government…built a small trading post near present-day Whiterocks where trappers could trade beaver pelts for supplies...

In 1861 Brigham Young sent a small party to explore the basin for possible settlement. They reported "that all that section of country lying between the Wasatch Mountains and the eastern boundary of the territory, and south of Green River country, was one vast contiguity of waste and measurably valueless." With this report, Young decided not to send settlers there.

That same year, President Abraham Lincoln created the Uintah Indian Reservation, thus beginning the relocation of many Utah and Colorado Indians to the Uinta Basin. In the 1880s the Uncompahgre Reservation (now part of the Uintah and Ouray Reservation) was created in the southern portion of Uintah County. Ashley Valley was not part of

either reservation, and by 1880 enough ranchers and farmers had settled there that the territorial legislature created Uintah County, taking most of the land from Wasatch County. The county seat, originally in Ashley, was later moved to the larger community of Vernal. With the building of irrigation canals other towns were founded, including Jensen, Maeser, and Tridell.

In about 1888 Gilsonite was discovered in various parts of the county and on the eastern portion of the Uncompahgre and Uintah reservations. Miners quickly persuaded the federal government to withdraw 7,000 acres from the Uintah Reservation so that they could legally mine Gilsonite. This area, called "The Strip," for a time lacked any law and order.

Uintah County's economy rests on farming, ranching, and the removal of oil and gas. It is increasingly influenced by worldwide energy prices. (Written by Craig Fuller from www.media.utah.edu)

Naples…is in the eastern section of the Ashley Valley on US-40, two miles southeast of Vernal. The settlement was named for the prominent city in Italy. It also had earlier names…such as Merrill for Porter William Merrill, a local church official; Riverdale, because it was located on the Green River; and Frogtown, because of the large number of frogs in the vicinity. Bishop P. W. Merrill suggested that the name be changed from Merrill to Naples. (Written by John W. Van Cott, www.onlineutah.com)

1.2. Study Need

Naples has seen a 2.55% population decrease in the last decade and an 11.19% population decrease in the decade before. From 1980 to 2000, the population has decreased 13.45%. Yet, in the last few years the population has started to increase once again. Population in the Uinta Basin area has shown an overall increasing trend and a well-established transportation plan is needed to provide direction for continual maintenance and improvements to Naples's transportation system.

With the growing population of Naples the need for system improvements and a more extensive transportation plan is necessary for Naples and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, and OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Naples recognizes the importance of building and maintaining safe roadways, not

only for the vehicle traffic, but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a transportation master plan for Naples. Naples could adopt this plan as a companion document to the City's General Plan. With the transportation master plan in place the City can qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid transportation master plan to guide future developments and roadway expenditures. The plan includes two major components:

- Short-range action plan
- Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advanced planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area includes Naples and land adjacent to it that is in Uintah County. A general location map is shown in Figure 1-1. A more detailed map of the study area and City limits is shown in Figure 1-2. The study area was developed by Naples and approved by the Naples Community Transportation Plan Technical Advisory Committee.

The roadway network within the study area includes US-40, US-191, SR-45 and SR-121. Each of these roadways provides a vital function to Naples, to Uintah County and to the State of Utah. US-40 connects all points east and west including Salt Lake City and Colorado. US-40 is also the main street through Naples. US-191 connects Naples to Flaming Gorge Reservoir, Daggett County and eventually Wyoming. SR-121 connects Naples, through Vernal, to points west in Uintah County. SR-45

1.5. Study Process

The Study, which began in December 2005, is proceeding as a cooperative effort between Naples, UDOT, and local community members. It is being conducted under the guidance of Naples Officials.

The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee, or "TAC," for this document.

- Dean Baker, Mayor, Naples
- Ken Reynolds, City Council
- Dale Bowden, City Council
- Craig Blunt, Zoning
- Hugh Oldaker, Zoning
- M. D. Nash, Zoning
- Lloyd Barton, Planning and Zoning
- Rolen E. Banis, Zoning
- Dal Harnson, Zoning
- Bruce Cook, Planning and Zoning
- Lloyd Dran, Basin Western
- Beverly Ulibarri, Secretary
- Dennis Hatch, Basin Western
- Carol Judd, Realtor
- Grant Hatch, Citizen
- Cresta Slaugh, Citizen
- Ted Slaugh, Citizen

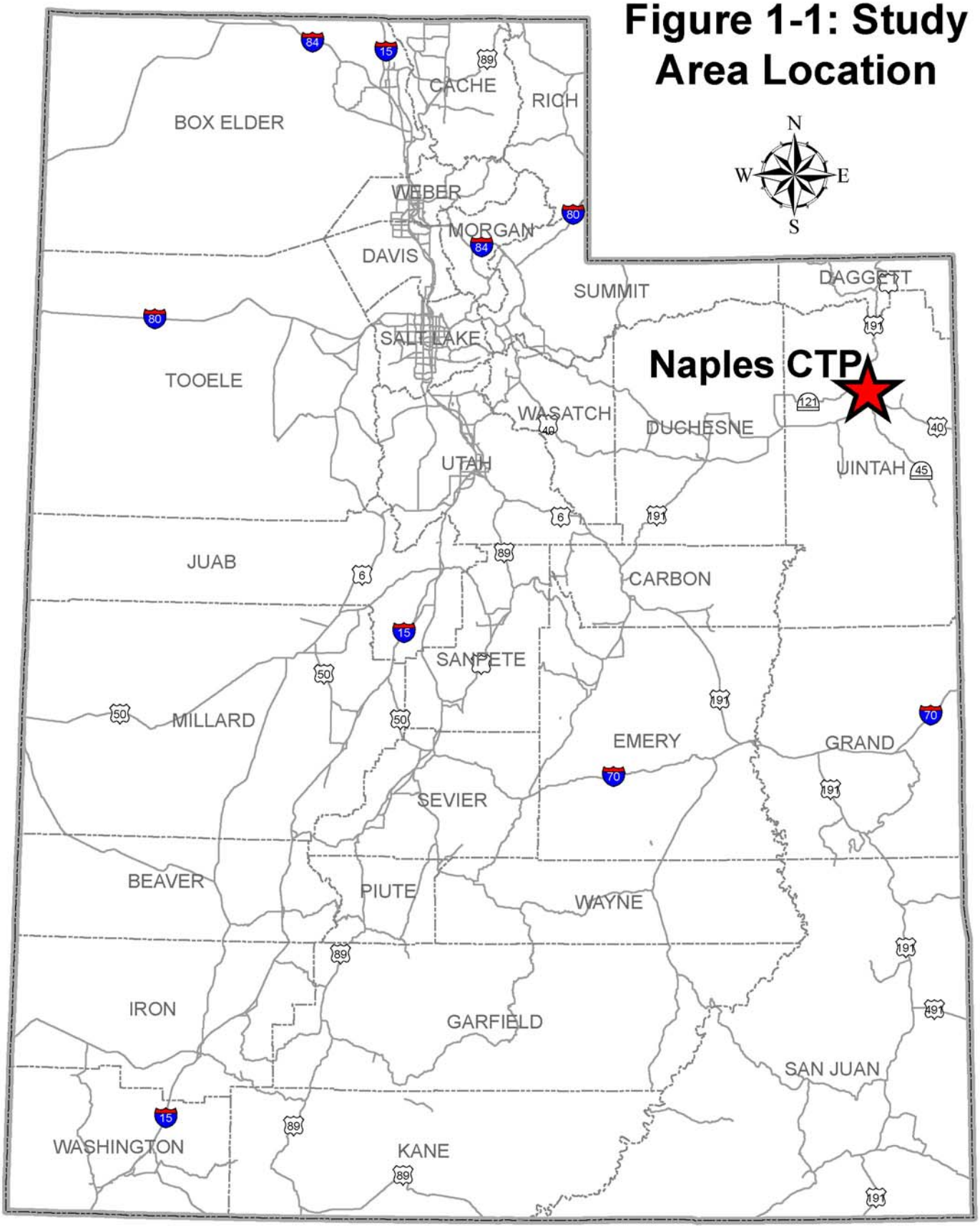
Figure 1-1: Study Area Location
N
W
E
S
Naples CTP
BOX ELDER
CACHE
RICH
WEBER
MORGAN
DAVIS
SUMMIT
DAGGETT
SALT LAKE
TOOELE
WASATCH
DUCHESNE
UINTAH
UTAH
JUAB
CARBON
SANPETE
MILLARD
EMERY
GRAND
SEVIER
BEAVER
PIUTE
WAYNE
IRON
GARFIELD
SAN JUAN
WASHINGTON
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191
121
40
45
6
50
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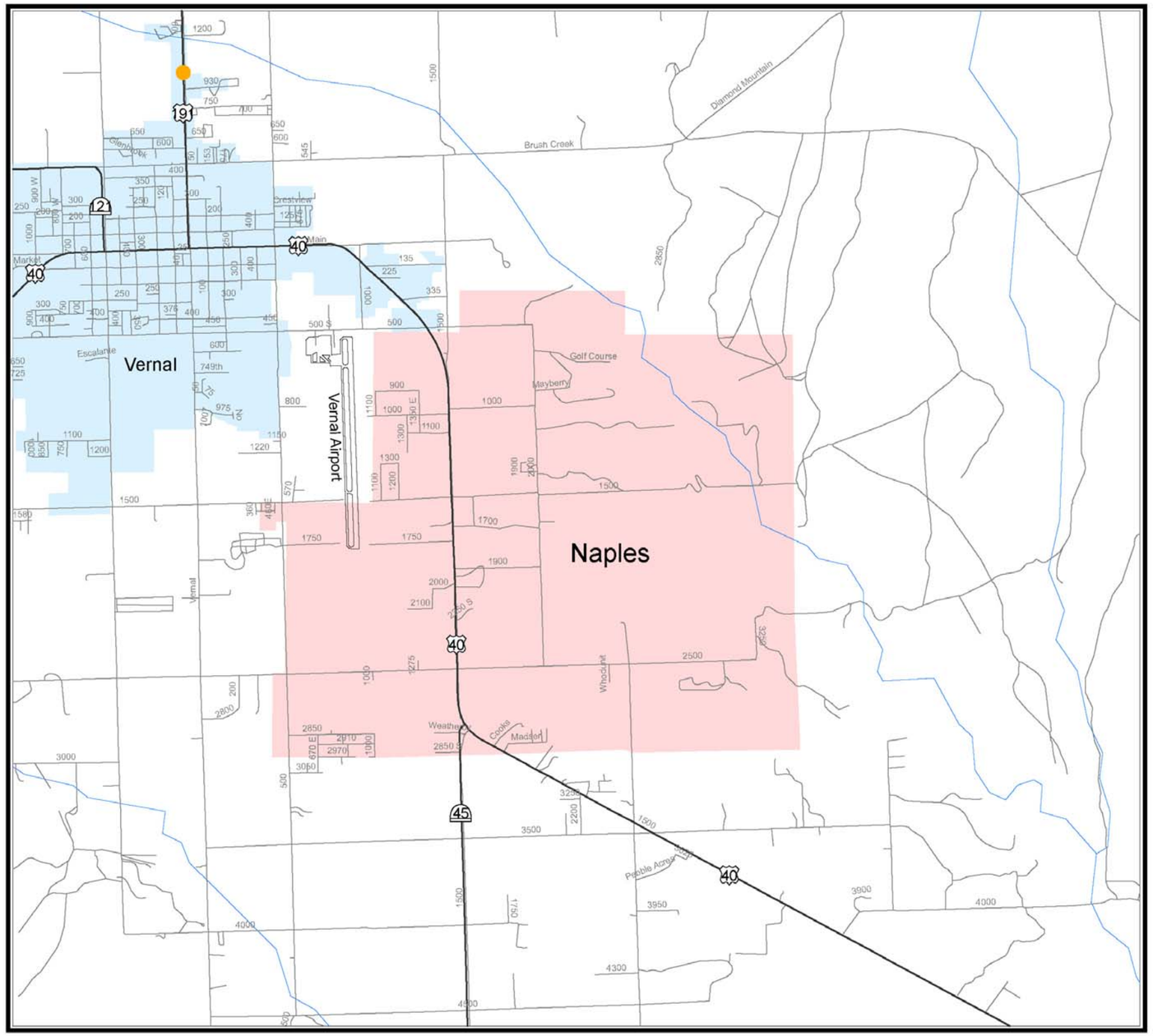


Figure 1-2: Naples Study Area Vicinity

The study process for the Naples Community Transportation Master Plan consists of three basic parts: (1) inventory and analysis of existing conditions, (2) projection of future conditions, and (3) development of a community transportation master plan (CTP). This process involves the participation of the TAC for guidance, review, evaluation, and recommendations in developing the CTP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's final report draft. The remainder of the final report draft will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the sort-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop provides an inventory and analysis of existing conditions and identification of needed transportation improvements. The second TAC workshop will focus on prioritization of projects, estimation of project costs, and discussion of the funding process.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The final report draft will be submitted to the City for review and comments.

Upon local review of the draft report, UDOT will make appropriate changes and submit the final report to the City for approval. The final report will describe the study process, findings and conclusions, and will document the recommended transportation system projects and improvements.

2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. Much of the City is zoned Residential, but there are also many issues dealing with commercial and industrial properties. By analyzing the patterns or changes in land use, we can better predict the ever-changing transportation needs.

The Naples Zoning map follows in the Appendix.

2.2. Environmental

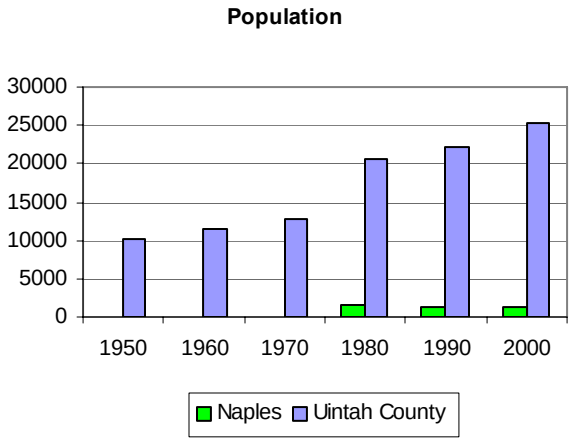
In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Protecting the environment is a critical part of the transportation planning process.

2.3. Socio-Economic

Naples ranks 94th out of 235 incorporated cities and towns for population in the state of Utah. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Uintah County and Naples. Chart 2-2 identifies that population change in Naples has ranged from negative 15.24% between 1950 and 1960 to 47.63% between 1970 and 1980, while growth in the State has gained between 18 and 38 percent each decade during the past 50 years.

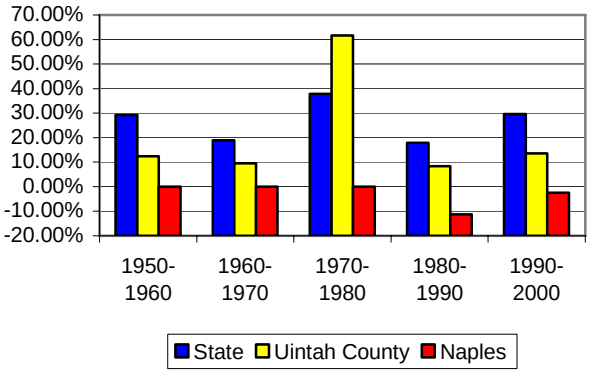
Year	Utah	Uintah County	Naples
1950	688,862	10,300	N/A
1960	890,627	11,582	N/A
1970	1,059,273	12,684	N/A
1980	1,461,037	20,506	1,502
1990	1,722,850	22,211	1,334
2000	2,233,169	25,224	1,300



As the State population has grown every decade from 1950 until 2000, Uintah County has shown variable growth in the same time period.

Decade	Utah	Uintah County	Naples
1950-1960	29.29%	12.45%	N/A
1960-1970	18.94%	9.51%	N/A
1970-1980	37.93%	61.67%	N/A
1980-1990	17.92%	8.31%	-11.19%
1990-2000	29.62%	13.57%	-2.55%

Decenial Population Change



Naples has some unique demographic characteristics when compared with the State, particularly with age demographics. In the 25 to 54-age category, the State is at 38.6% the County is at 34.4% and the City is at 34.1%. For the 65+-age category, the state is at 8.5%, the county is at 12.3% and the City is at 13.3%. The State's median age is 27.1 years; the County's median age is 29.9 years; the City's median age is 29.8 years. Another interesting statistic is that of Veteran status with State at 10.7%, the County 11.8% and Naples at 12.7%.

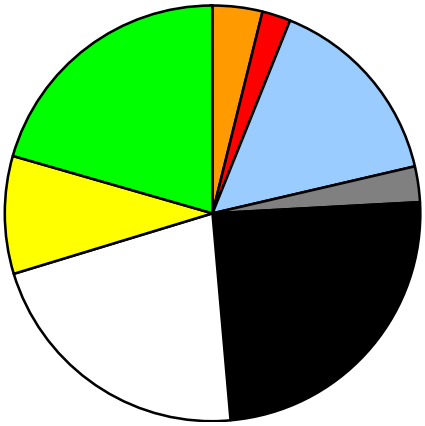
The 2000 median household income in Naples is $31,719, compared to the State median household income of $45,726.

The unemployment rate in Naples was 4.0 percent in 2000. According to the Utah Department of Employment Security (UDES), in 2000 there were approximately 867 employed people in Naples, or 56.3% of the population. The City had 62 unemployed people, which is 4.0% of the population. There are 4,876 employed people in Uintah County, or 57.6% of the population. The County has 303 people unemployed, which is 3.6% of the population.

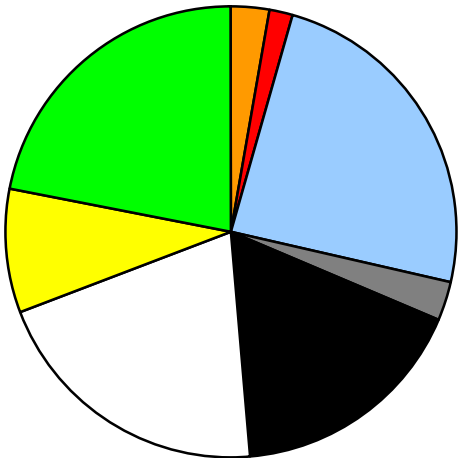
The majority of employees in Uintah County work in four primary employment sectors: Government, Trade, Telecommunications and Public Utilities, and Service as shown in the following charts. In the County, these sectors make up 87.40% of the labor force. Another interesting note was that housing built from 1990-2000 was 10.2% of the total for Naples compared to 25% for the State. Also, homes built before 1939 were 34.4% of the total for Naples with 10% for the State.

Sector	1980	1990	2000	Δ% 1980-2000
Construction	3.97%	2.93%	5.53%	91.85%
FIRE	2.28%	1.64%	1.85%	11.61%
Government	15.34%	24.16%	21.19%	90.04%
Manufacturing	2.66%	2.90%	2.69%	39.23%
Mining	24.54%	17.28%	15.92%	-10.78%
Services	21.81%	20.66%	23.51%	48.32%
TCPU	8.98%	8.89%	6.16%	-5.56%
Trade	20.71%	22.12%	23.58%	56.64%

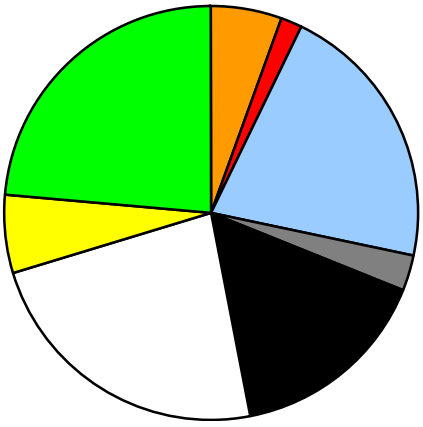
1980 Employment Sectors



1990 Employment Sectors



2000 Employment Sectors



2.4. Functional Street Classification

This document identifies the current functional characteristics of the selected roadway network of Naples. Functional street classification is a subjective means to identify how a roadway functions when a combination of the roadway's characteristics are evaluated. These characteristics include: roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.

The primary functional classifications used in categorizing selected roadways of Naples are: Interstate and Collector. An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

The Naples area is accessed by I-15 from the north and south via SR-99, which runs almost the entire length of the City. Naples is accessed from the west by SR-100, which eventually connects to US-50 to the north. I-15 extends northward toward the Wasatch Front, Salt Lake City area, at a distance of 142 miles. I-15 extends southward toward the Dixie area, St. George area, at a distance of 162 miles.

The current functionally classified system generally defines the higher traffic roads, so

only minor additions or changes will be required.

2.5. Bridges

There is one bridge on the state system in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. (Figure 2-3 Bridge Sufficiency Rating)

Table 2-1 compares the bridges in the study area and identifies their sufficiency ratings and locations. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding.

2.6. Traffic Counts

Recent average daily traffic counts were obtained from UDOT. The following table shows the traffic count data on the key roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

In addition to the 24-hour period shown in the table, an informal 15-minute count was conducted at several intersections Along US-40 in the Naples area. The counts are shown in the table on the following the AADT table.

Road	Segment	Year	AADT
40	SW INCL Vernal to US-191	2004	21,045
40	US-191 to North INCL Naples	2004	27,355
40	North INCL Naples to SR-45	2004	13,055
40	SR-45 to South INCL Naples	2004	4,640
40	South INCL Naples SR-149	2004	4,465
45	4500 South to US-40	2004	1,810
121	Maeser to West INCL Vernal	2004	7,745
121	West INCL Vernal to US-40	2004	9,860
191	US-40 to North INCL Vernal	2004	3,920

Location	Time	Truck	Total
500 South	10:55 am – 11:10 am	10	78
1000 South	11:12 am – 11:27 am	0	21
1500 South	2:03 pm – 2:18 pm	7	71
1900/2000 South	1:47 pm – 2:02 pm	0	6
2500 South	1:30 pm – 1:45 pm	0	50
SR-45	1:13 pm – 1:28 pm	10	65
SR-45	5:22 pm – 5:37 pm	5	89

A map illustrating existing and future traffic and roadway capacities is presented in the Traffic Forecast, section 3.2.

2.7. Traffic Crashes

Traffic accident data was obtained from UDOT's database of reported accidents from 2004. Table 2-3 summarizes the accident statistics for those segments for the

year 2004. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the State.

Upon review of the accident data for the State system in the area, there appears to be higher than expected accident rates at the following locations:

- On US-40 from SR-45 to South INCL of Naples
- On US-40 from South INCL of Naples to SR-149

The remainder of the State system shows a lower than expected accident rate. Figure 2-4 shows a safety index, which incorporates crash data taken from 2002-2004. Various segments of the State highway system and associated crash data are show.

Naples may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

					Crash Rate**	
Road	**From Milepost**	**End Milepost**	**ADT (2004)**	**# Crashes (2004)**	**Actual**	**Expected***
40	142.22	144.72	21,045	79***	3.46	4.22
40	144.73	145.98	27,355	12	0.98	6.41
40	145.99	148.70	13,055	13	1.45	1.70
40	148.71	149.43	4,640	3	1.89	1.49
40	149.44	157.57	4,465	27	1.56	1.49
45	38.25	39.93	1,810	1	1.22	2.41
121	37.71	38.72	7,745	10	3.73	4.40
121	38.73	40.19	9,860	17	3.34	4.40
191	352.61	353.45	3,920	0	0.00	1.74

*Statewide average crash rates for functional class and volume group.
**Crash rates per million vehicle miles traveled.
***One fatality during 2004.
Red indicates higher than expected rate for crashes.

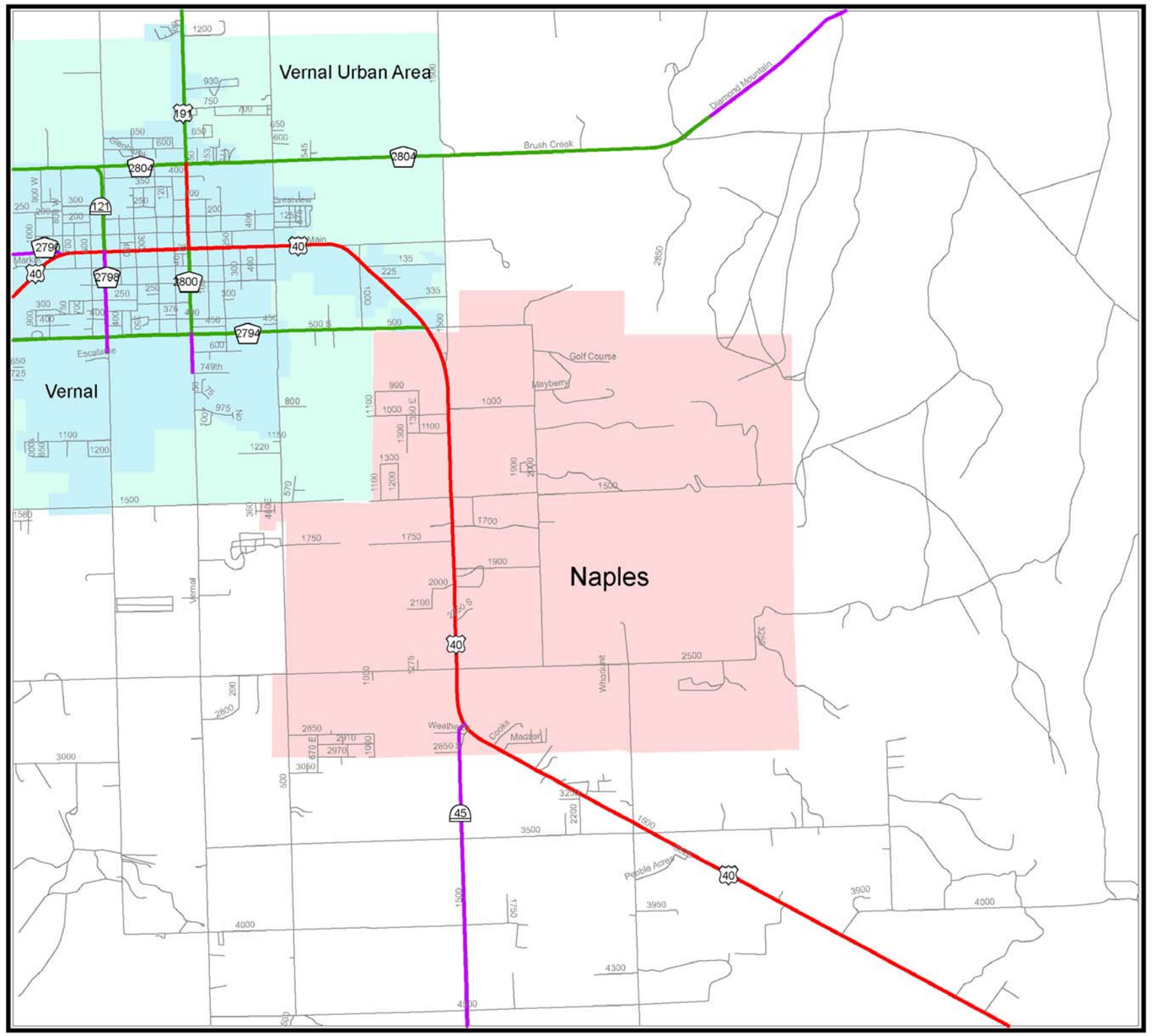


Figure 2-2: Existing State and Federal Routes Classification

Functional Class

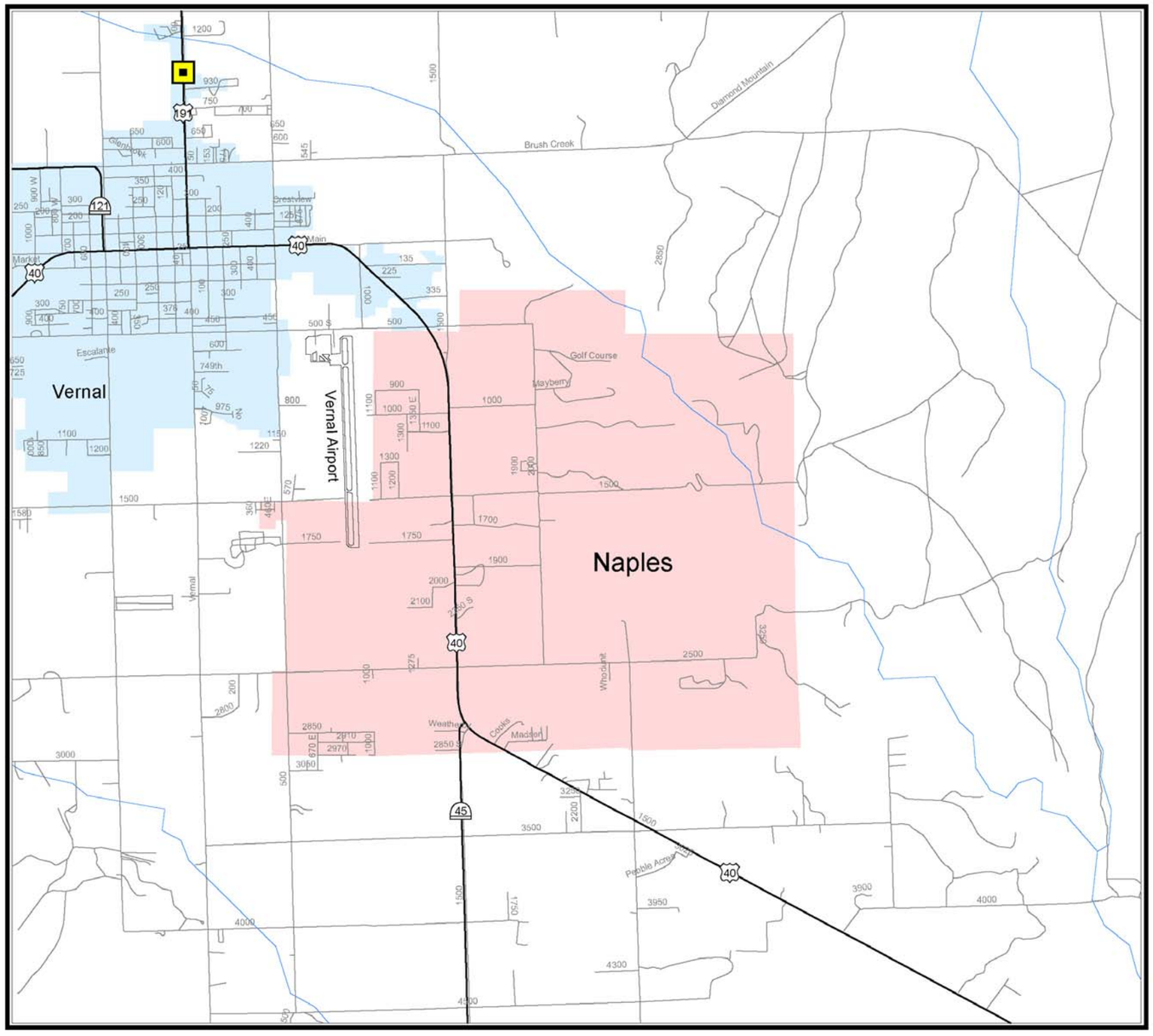
- Interstate
- Freeway Expressway
- Other Principal Arterial
- Minor Arterial
- Collector
- Minor Collector
- Local
- Other Roads
- City Boundaries

NOTE: Proprosed Routes are indicated by dashed line.

N

1 0.5 0 1 2 3 Miles

Figure 2-3: Bridge Sufficiency Rating



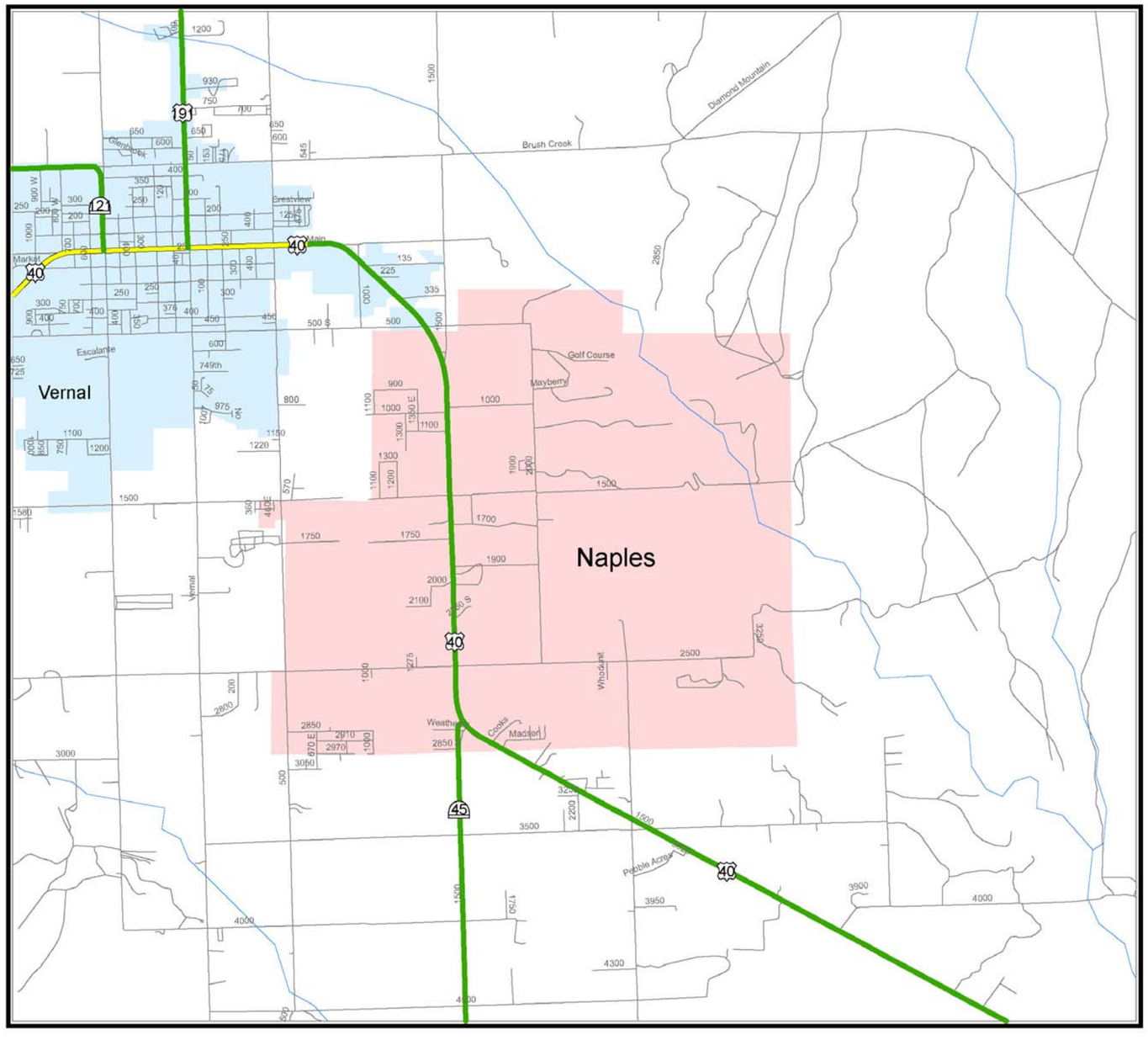


Figure 2-4: State Road Safety Index

State Roads

Safety Index Group

- Low
- Medium
- High
- Other Roads
- Water Courses
- City Boundaries

N

1 0.5 0 1 2 3 Miles

2.8. Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. In following this directive, Naples is encouraged to adopt a “complete streets” philosophy that allows for the advancement of a transportation system for both motorized and non-motorized travel.

2.8.1. Biking/Trails

Naples City has completed an Alternative Transportation Plan that includes accommodating the various modes of travel. This plan addresses the desired connectivity of current and future bicycle facilities.

Additionally, Uintah County is beginning to organize and develop a countywide trails plan.

Naples City does not have designated painted bike lanes, but there is a concerted effort to provide ample shoulder in order to accommodate biking and walking. Some of the roads in Naples have been widened to a 14’ travel lane with a 6” paint line separating the travel lane from the shoulder in order to increase safety. Most of the roads in the City of Naples have 4’ of available shoulder, with no curb and gutter.

The City maintains the roads and performs regularly scheduled sweeping in order to clean the roads of hazardous debris. They have also implemented a skim coat process that is included whenever a chip seal application is performed on a city road. This additional smooth layer is placed on top of the chip seal to reduce the amount of rock chips left on the roadway after the project. The additional top layer creates a better condition for bicycling.

Typical on-street bicycle riders in Naples consist mostly of community members. However, on occasion there are bicycle tour groups that travel along US-40 through Naples. This type of bicycle travel has the potential for an economic gain for the City.

As in the case of most rural communities, there are a number of ATV’s ridden in and around Naples. Most ATV riding is done in appropriate locations, but the City has adopted an ordinance that prohibits ATV use in the park to eliminate out of bounds riding. The county, state or federal agencies owns much of the land around Naples, and all have developed ATV trails where many community residents recreate.

2.8.2. Pedestrians

Many of the local roads in Naples do not have sidewalks to accommodate pedestrians. Most pedestrian travel is done by utilizing the road shoulder. There are plans to expand the few areas that do have sidewalks and the City is working with developers to include sidewalks in new developments. An indication from the City is that a connected sidewalk system is important to the community. Currently most pedestrian travel is accomplished by using the large roadway shoulder.

2.9. Public Transportation

Aside from local senior citizen shuttle service and two taxicabs, the Vernal/Naples area has no public transportation service. Limited commuter airline service is provided at the Vernal Municipal Airport, linking the Uinta Basin with Salt Lake City. There is no intercity bus service along the US 40 corridor between Salt Lake City and Denver via Naples.

2.10. Freight

Freight is a major factor in traffic flow and street/highway infrastructure planning in Naples. Located in the heart of the Uinta Basin energy resource region, Naples is the industrial service center of the Vernal/Naples metro area, with many freight-generating businesses primarily serving the energy extraction industry.

Lacking railroad service and adequate pipeline facilities, the Uinta Basin is totally dependant on trucks to provide local, regional, and interstate freight movement. On an average weekday, more than 500 trucks pass through Naples on both US 40 and SR 45. While some of these trucks are long-haul rigs passing through the region, most are bringing in energy-related equipment and supplies, while others ship crude oil to refineries in the North Salt Lake area, as well as in Wyoming and Colorado.

The focal points in Naples where truck traffic has the greatest impact on auto traffic and local congestion are at the intersections of US 40 and SR 45, 500 South and 1500 South. Lack of proper access management has also resulted in large trucks entering and leaving US 40 all along the industrial corridor between 500 South and SR 45.

2.11. Aviation Facilities and Operations

The Vernal Municipal Airport is located partly in Naples, and provides commuter airline service between the Uinta Basin and Salt Lake City, where scheduled major airline service is available. For more information on facilities and operations at the Vernal Airport, see the Vernal CTP document from 2004.

2.12. Revenue

Maintenance of existing transportation facilities and construction of new facilities come primarily from revenue sources that include the Naples general fund, federal funds and the State Class C funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the City is limited in their ability to subsidize the transportation budget from general fund revenues.

2.12.1. State Class B and C Program

The distribution of Class B and C Program monies is established by State legislation and is administered by the Utah Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees,

inspection fees, and transportation permits. Twenty-five percent of the funds derived from the taxes and fees are distributed to cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each city and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the Class C roads weighted mileage within each municipality bear to the total Class B and Class C roads weighted mileage within the State. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled roads multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108) For more information go to UDOT's homepage at www.udot.utah.gov, tab on "Doing Business" select the tab for "Local Government Assistance" here you will find the regulations governing Class B and C funds.

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Paved Road (x5) Graveled Road (x2) Other Road (x1)
50%	Total Population

Class B and C funds can be used for maintenance and construction of highways, or anything that is directly related to transportation, as defined by State law. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Naples received $108,184.97 in 2005 for its Class C fund allocation.

2.12.2. Federal Funds

There are federal monies that are available to cities and counties through federal-aid programs. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for small urban areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation

Commission for funding. Transportation enhancements include 12 categories ranging from historic preservation, to bicycle and pedestrian facilities, to water runoff mitigation. Other funds that are available are the State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region Four, Cedar District. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3. Local Funds

Naples, like most cities, has utilized general fund revenues in its transportation program. Other options available to improve the City's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits an identifiable group of properties. Another source of funding is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4. Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct the local streets within the subdivision and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts to the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

Naples's Community Transportation Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated in the evaluation and analysis of future transportation needs. This is done by

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data are then used to identify future deficiencies in the transportation system.

3.1.1. Population and Employment Forecasts

The Governor's Office of Planning and Budget develop population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Naples and Uintah County in the following table.

Population and Employment

Year	City	County	
	Population	Population	Employment
2000	1,300	25,224	13,004
2030	1,767	29,889	16,125

3.1.2. Future Land Use

The City has an annexation plan that describes where it plans to grow. Some areas for developments were discussed during the course of the Community Transportation Plan. Updated Land Use documents can be found in the Naples General Plan.

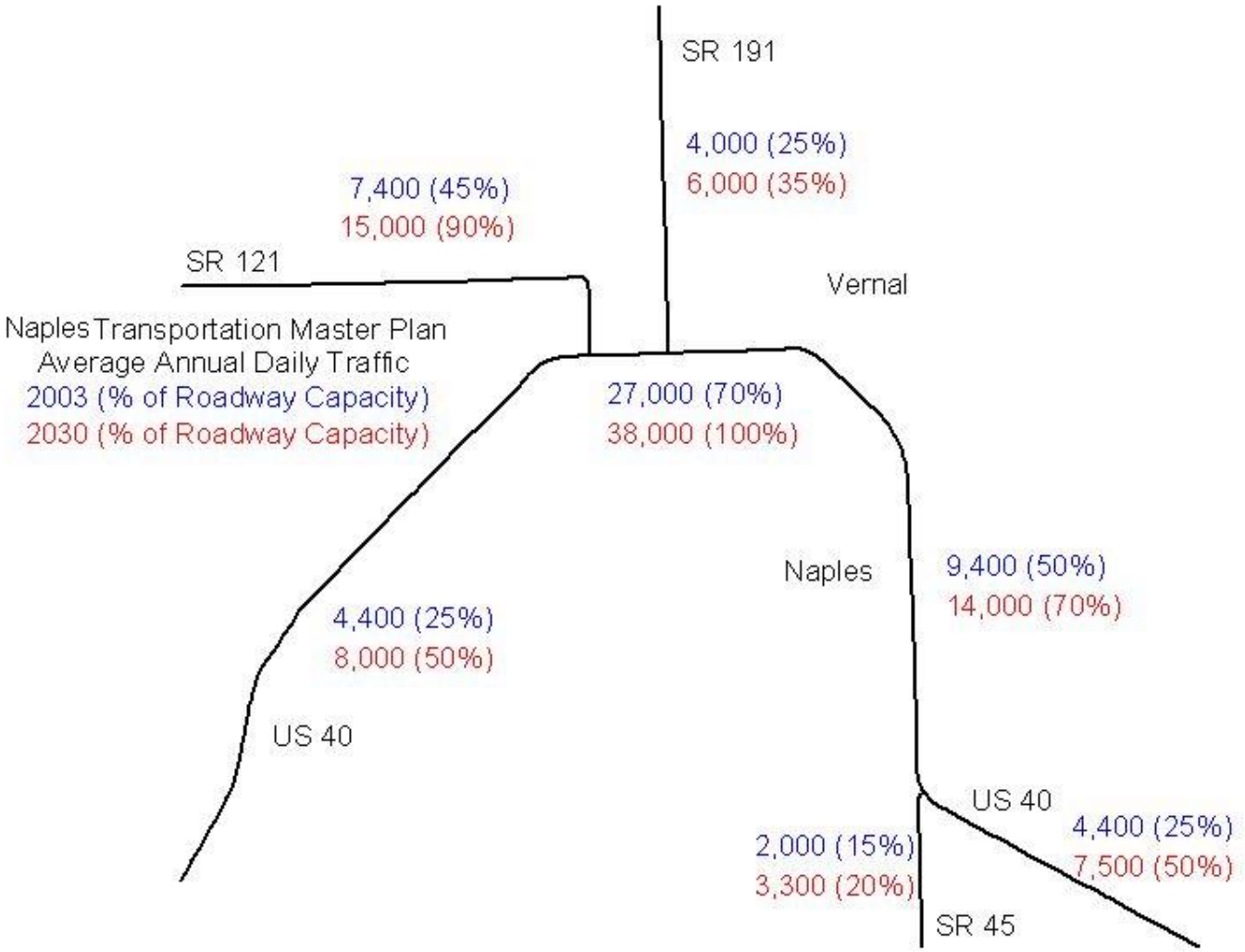
While specific development plans change with time, it is important to note possible areas of development within the Naples area. Commercial and industrial growth is also important in understanding transportation needs.

3.2. Traffic Forecast

Traffic forecasts in the rural areas of Utah are based on historic traffic volumes from the previous 20 years, with a straight-line forecast to estimate future traffic volumes. The forecasts are then inserted into the database for analysis and display. The forecast numbers are for the years 2010, 2020, and 2030. These show a steady increase in traffic for all of the roadways in the study area.

In Naples City, traffic volumes have increased 1% to 7% a year, with population growing at similar rates.

Figure 3-1: Average Annual Daily Traffic
yr. 2003; yr. 2030



4. Transportation Improvement Projects

4.1. Current State Transportation Improvement Program (STIP)

At the present time there are several projects under consideration and investigation in the Naples area. Currently in the STIP are the following Projects:

- US-40; East Roosevelt to E. Ballard City Limits – Widen to Three Lanes
- Various Bridge Replacement and Local Government Projects

Also, these projects are currently listed on the State of Utah's Long Range Plan, Utah Transportation 2030:

- Safety Project on SR-121 from 2500 West to US-40

4.2. Recommended Projects

The following list identifies the five projects that have been identified as having the highest priority to the Naples Transportation Advisory Committee. These needs were identified through a series of meetings where the TAC identified the needs and set priorities for projects.

- Widen US-40 from Vernal to Roosevelt
- Widen SR-45 and realign Intersection of US-40 and SR-45
- Intersection Improvements at US-40 and 1500 South
- Intersection Improvements at US-40 and 500 South
- Signal Warrant Studies with possible signals at US-40 and 500 South and US-40 and 1500 South

Additionally, many concerns and issues were identified which are found on the attached list.

4.3. Revenue Summary

4.3.1. Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Community Transportation Plan so that they understand what the City wants to do with its transportation system. UDOT can then weigh the priorities of the city against the rest of the State. It is important for Naples to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage at www.udot.utah.gov, tab on "Doing Business" select the tab for "Systems Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally, coordination with UDOT's Region Director and Planning Engineer will be practical.

4.3.2. City Participation

The City will fund the local Naples projects. The local match component and partnering opportunities vary by the funding source.

Enoch Town Transportation Needs and Cost Estimates

Route	Project Description / Concept State Highway Projects (LRP)	Start Point	End Point	Length or Quantity	Improvement	Estimated Project Cost
40/45	Widen SR-45 and Realign Intersection of US-40 and SR-45	MP 39.43	MP 39.93	0.50 mile	Widening/Intersection	$1,250,000
40	Intersection Improvements US-40 and 500 South			1 lump	Intersection	$1,000,000
40	Intersection Improvements US-40 and 1000 South			1 lump	Intersection	$1,000,000
40	Intersection Improvements US-40 and 1500 South			1 lump	Intersection	$1,500,000
40	Widen US-40 from Vernal to Roosevelt	Roosevelt	Vernal	30 miles	Widening	$30,000,000
45	Widen SR-45 in Residential Area			1.5 miles	Widening	$3,000,000
	Bypass around Naples/Vernal			10 miles	New Construction	$20,000,000
	Right-of-Way Acquisition (Local Roads)					
	Average of 70 ft width/road at $10,000/acre			250 acres	Acquisition	$2,500,000
	Local Streets Projects					
	Widen 2500 South and Intersection Improvements with US-40	2700 East	500 East	2.5 miles	Widening	$2,000,000
	Extend 2000 East to US-40	2500 South	US-40	0.75 miles	New Construction	$600,000
	Extend 3000 South East	2000 East	2500 East	0.75 miles	New Construction	$600,000
	Extend 1000 East	1000 South	3000 South	2 miles	New Construction	$1,750,000
	Pedestrian/ Bicycle/ATV Projects					
40	Pedestrian Overpass over US-40 at Approximately 2500 South			1 lump	Overpass	$2,000,000
40	Sidewalks Along US-40, Both Sides	500 South	SR-45	3.5 miles	Sidewalk	$300,000
	Sidewalks along 2500 South			4.5 miles	Sidewalk	$1,200,000
	Sidewalks along 1500 South			2.75 miles	Sidewalk	$800,000
	Sidewalks along 500 South			1 mile	Sidewalk	$265,000
	Sidewalks along 2000 East			4 miles	Sidewalk	$1,100,000
	Sidewalks along 500 East			2 miles	Sidewalk	$600,000
	Traffic Signals (ITS)					
40	Signal Warrant/Traffic Signal US-40 and 2500 South			1 lump	Signal	$300,000
40	Signal Warrant/Traffic Signal US-40 and 1500 South			1 lump	Signal	$300,000
40	Signal Warrant/Traffic Signal US-40 and 500 South			1 lump	Signal	$300,000
40/45	Signal Warrant/Traffic Signal US-40 and SR-45			1 lump	Signal	$300,000
	Signal Warrant/Traffic Signal 500 East and 2500 South			1 lump	Signal	$300,000
	Studies					
45	Speed Study on SR-45	US-40	65 MPH Limit	1 lump	Study	$10,000
	Access Management Plan			1 lump	Study	$10,000
	Corridor Preservation Plan			1 lump	Study	$10,000
40	Speed Study on US-40			1 lump	Study	$10,000
					Estimated Total Needs Costs	$73,005,000

* Review Ordnance/Process for New Developments to accommodate Traffic Circulation
* Preserve the Natural Scenic Beauty of Top Side by working with Developers.

4.4. Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects**.**
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (SAFETEA-LU is the current bill).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for the transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by the private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site improvements along their site frontage and by paying development fees. Municipalities commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the City's spending limit. However, development fees are often a controversial issue and may or may not be appropriate method of funding projects.

5. Appendix A – Planning Issues and Guidelines

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

5.1. Guidelines and Policies

These guidelines address certain areas of concern that are applicable to Naples's Community Transportation Plan.

5.1.1. Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits, businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

5.1.1.1. Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access management is one tool of many that makes a traffic system work better with what is available.

5.1.1.2. Access Management Techniques

There are many techniques that can be used in access management. The most common techniques used are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Access Management Program Coordinator.

5.1.1.3. Where to Use Access Management

Access management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

5.1.2. Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation

solutions that find, recognize and incorporate issues/factors that are part of the larger context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project becomes better for all of the entities involved.

5.1.3. Recommended Roadway Cross-sections

Cross sections are the combination of the individual design elements that constitute the template of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on-street parking, and control of driveway access. For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption in utility repairs or changes in service are needed.

Federal Highway standard widths apply on all the roads that are part of the State highway system. Also, all federally funded roadways in Naples and Uintah County must adhere to these same standards for widths and design.

5.2. Bicycles and Pedestrians

5.2.1. Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling in Naples, as growth occurs developers should be encouraged to include separate bicycle/pedestrian pathways in new developments. Opportunities to increase shoulder width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible. The City should continue to develop the facilities identified in their Alternative Transportation Plan, and work with the County in pursuing the countywide trails plan. As these plans progress, it will be important to note that regardless of the trails system's function, as all bike/trail facilities are planned, designed, and constructed, review of the connectivity of the trials system is critical. With input from the community, a review of the connectivity of the trails should play an integral part in the decision making process for potential projects. In order to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

5.2.2. Pedestrians

Every effort should be made to accommodate pedestrians in Naples. Although as referenced in Section 2 of this Plan, the City typically accommodates pedestrian travel on the road shoulder, an effort to increase the locations where sidewalk is available is recommended. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. When constructing sidewalk, for the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. As growth continues in the area Naples should require developers to include sidewalk placement in their project plans. The interconnectedness of the City's sidewalk system should be considered as development takes place.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers of in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed.

There may be an opportunity for Naples to begin a sidewalk placement plan through the Utah Department of Transportation's Safe Sidewalk program, available through the Traffic and Safety Division. The City should contact UDOT's Region 3 office for application requirements.

If schools are to be constructed within Naples, awareness of the requirement to develop a routing plan in cooperation with the area school is paramount. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

5.3. Enhancement Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been

reauthorized in subsequent bills (i.e. SAFETEA-LU). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by SAFETEA-LU:

The term `transportation enhancement activity' means, with respect to any project or the area to be served by the project, any of the following activities as the activities relate to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites (including historic battlefields), scenic or historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails), inventory, control, and removal of outdoor advertising, archaeological planning and research, environmental mitigation-- to address water pollution due to highway runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity-- establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and applications for the current cycle can be found on UDOT's homepage at www.udot.utah.gov, tab on "Inside UDOT," then choose "Internal Groups and Divisions," then choose "Systems Planning and Programming" and look in the Subtopics list for "Transportation Enhancements Program." On that page are downloads for the Program Guidelines and applications plus other helpful information about the Enhancement program. The UDOT Systems Planning and Programming office, on or before the specified date to be considered, must receive the applications. Projects will compete on a statewide basis.

5.4. Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping Naples's Community Transportation Plan. This section will define what Corridor Preservation is and ways to use it to help the Community Transportation Plan succeed the City.

5.4.1. Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the

public and the City. The land along the corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which are discussed here.

5.4.2. Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these there are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

5.4.2.1. Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the City is able to acquire undeveloped property, the City has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the City. Acquisition of land should be the last resort in any of the cases for transportation corridor preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public land Exchange
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

5.4.2.2. Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be helpful in preserving corridors for the Community Transportation Plan. Many of the ordinances that can be used for transportation corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

5.4.2.3. Voluntary Agreements and Government Inducements

Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental inducements that can be used in order to preserve transportations corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights

- Tax Abatement
- Agricultural Zoning

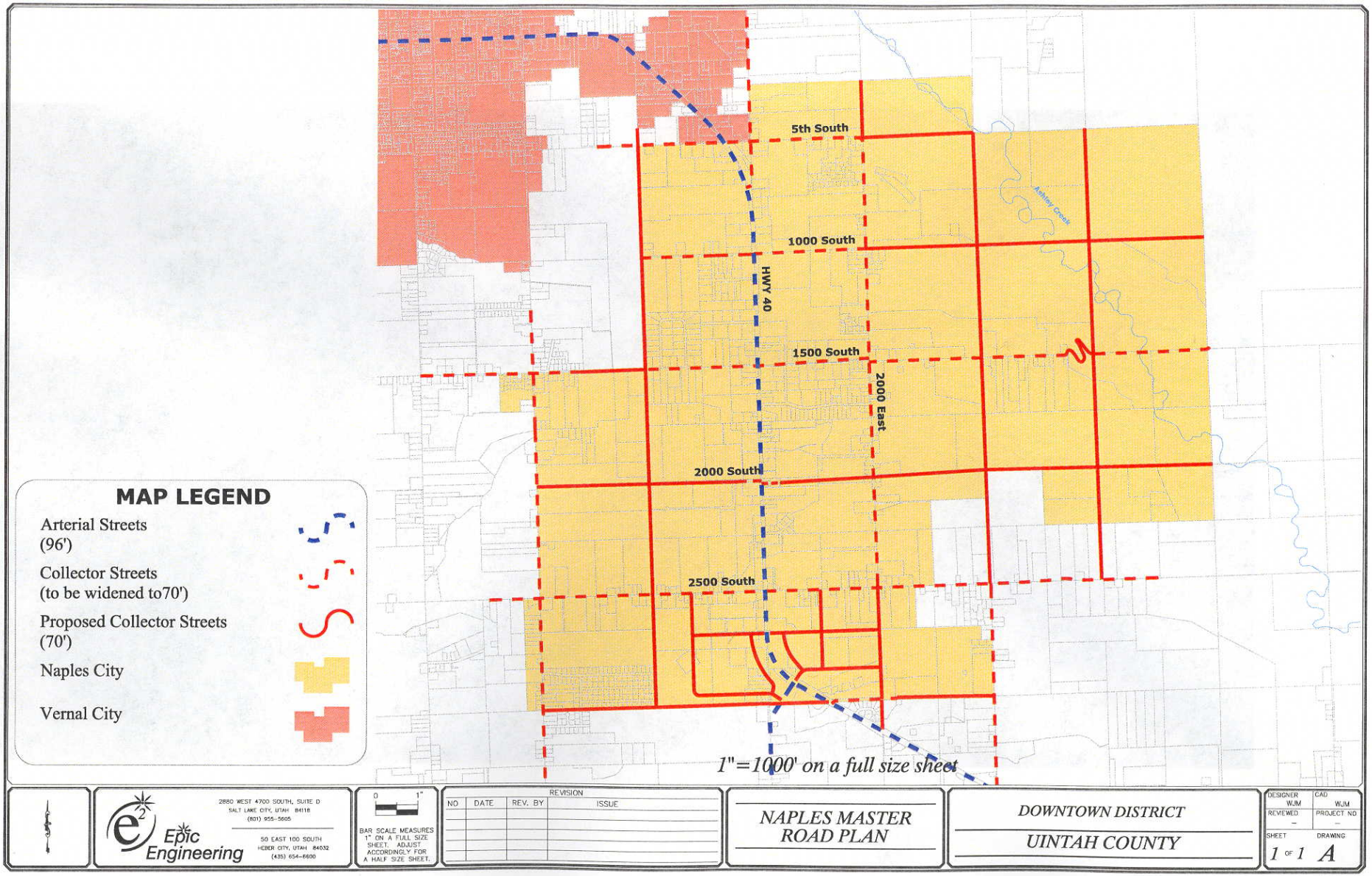
Each of these methods has its place, but there is and order that any government should try to use. Voluntary agreements and governmental inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit that contains references to Utah code and examples of how the techniques have been used in the past.

6. Appendix B

6.1. Zoning Map*

6.2. Travel Forecast Sheets (2003 – 2030)

6.3. Suggested Types of Cross-sections



Epic Engineering
2880 WEST 4700 SOUTH, SUITE D
SALT LAKE CITY, UTAH 84118
(801) 955-5605
50 EAST 100 SOUTH
HEBER CITY, UTAH 84032
(435) 654-6600

BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST ACCORDINGLY FOR A HALF SIZE SHEET.

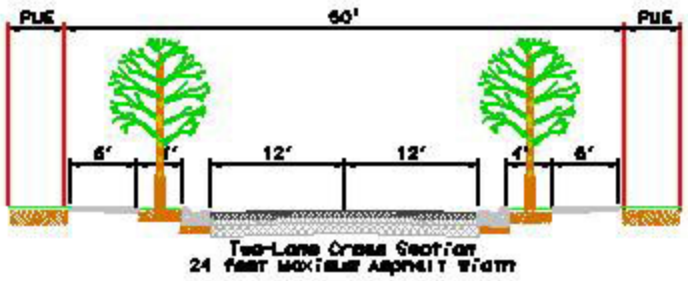
REVISION			
NO	DATE	REV. BY	ISSUE

NAPLES MASTER ROAD PLAN

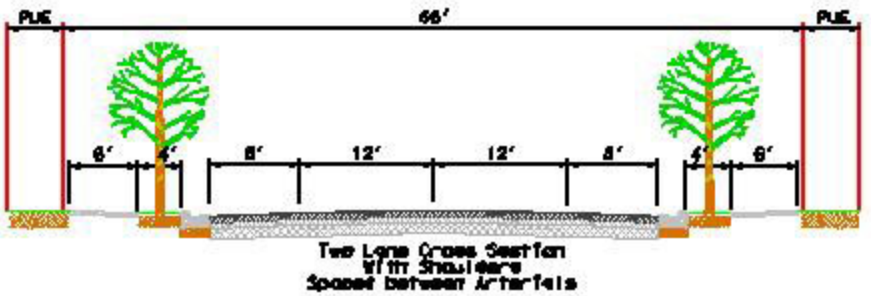
DOWNTOWN DISTRICT

UINTAH COUNTY

DESIGNER	CAD
WJM	WJM
REVIEWED	PROJECT NO
–	–
SHEET	DRAWING
1 OF 1	A

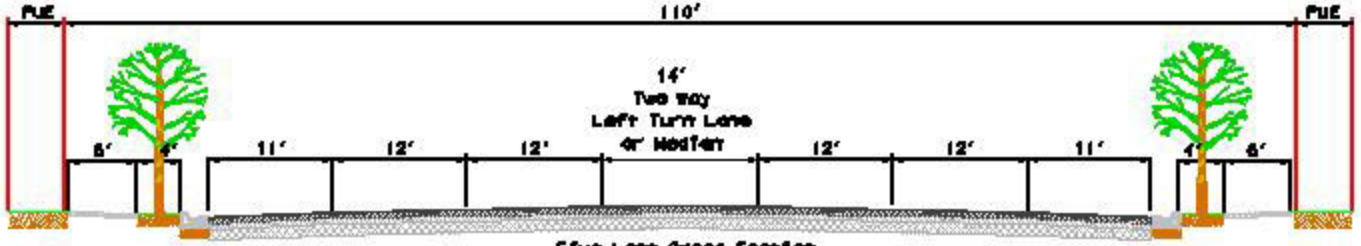


Two-Lane Cross Section
24 feet Maximum Asphalt Width



Two Lane Cross Section
With Shoulders
Spaced between Arterials

Three Lane Cross Section
With Shoulder
Spaced between Arterials



Five Lane Cross Section
With Sholders
Minimum spacing approximately ¼ mile

Notes:

1. Sidewalk Dimension varies from 4' to 6' (See UDOT Std Dwg 08 II Note 3)
2. Public Utility Easement (PUE) dimension varies from 2.5' to 12' Typical
3. Shoulder Dimensions:
   on 80' ROW - varies from 8' to 12'
   on 110' ROW - varies from 10' to 12'
   See AASHTO A Policy on Geometric Design of Highways and Streets

10 5 0 10 20 30

Scale in Feet

Suggested Typical Cross Section

Revised: September 16, 2004